

### **REMARKS/ARGUMENTS**

The Applicants have carefully considered this application in connection with the Examiner's Action and respectfully request reconsideration of this application in view of the foregoing amendment and the following remarks.

The Applicants originally submitted Claims 1-37. In a previous Amendment the Applicants cancelled Claims 1-24 without prejudice or disclaimer. Presently, the Applicants have amended Claim 25, and have neither amended, cancelled nor added any other claims. Accordingly, Claims 25-37 are currently pending in the application.

#### **I. Rejection of Claims 25-28, 32, 36 and 37 under 35 U.S.C. §102**

The Examiner has rejected Claims 25-28, 32, 36 and 37 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,645,821 to Bailey ("Bailey"). Independent Claim 25 currently includes the element that a second dielectric layer is located directly on a resistive layer and directly on a top surface of the first and second contact pads. Bailey fails to disclose this element.

Bailey, similar to the present invention, is directed to a method for producing a thin film resistor in an integrated circuit. (Title). The Examiner asserts that Bailey teaches a second dielectric layer (90) located over the resistive layer (60) and the first and second contact pads (70). However, as is evident by the FIGUREs of Bailey, the second dielectric layer (90) is not located directly on the resistive layer (60) and directly on a top surface of the first and second contact pads (70), as is presently claimed in independent Claim 25. Accordingly, Bailey fails to disclose this claimed element.

Therefore, Bailey does not disclose each and every element of the claimed invention and as such, is not an anticipating reference. Because Claims 26-28, 32, 36 and 37 are dependent upon Claim 25, Bailey also cannot be an anticipating reference for Claims 26-28, 32, 36 and 37. Accordingly, the Applicants respectfully request the Examiner to withdraw the §102 rejection with respect to these Claims.

## **II. Rejection of Claim 30 under 35 U.S.C. §103**

The Examiner has rejected Claim 30 under 35 U.S.C. §103(a) as being unpatentable over Bailey. Independent Claim 25 currently includes the element that a second dielectric layer is located directly on a resistive layer and directly on a top surface of the first and second contact pads. As previously established, Bailey fails to disclose this element. Bailey further fails to suggest this element. Specifically, Bailey fails to suggest this element because Bailey explicitly requires that a metal interconnect (100) completely cover an entirety of its first and second contact pads (70).

Moreover, one skilled in the art would not be motivate to move the metal interconnect (100) of Bailey to allow its second dielectric layer (90) to be located directly on an upper surface of its first and second contact pads (70), such as claimed in the present invention. Doing so would require the process used to manufacture the device of Bailey to be completely reworked, which would not be an obvious variance to the process already employed. Accordingly, one skilled in the art would not be motivated to make such an adjustment.

Thus, Bailey fails to teach or suggest the invention recited in independent Claim 25 and its dependent claims, when considered as a whole. Accordingly, Bailey fails to establish a prima facie

case of obviousness with respect to those claims. Claim 30 is therefore not obvious in view of Bailey.

In view of the foregoing remarks, the cited reference does not support the Examiner's rejection of Claim 30 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner withdraw the rejection.

### III. Rejection of Claim 31 under 35 U.S.C. §103

The Examiner has rejected Claim 31 under 35 U.S.C. §103(a) as being unpatentable over Bailey in view of U.S. Patent No. 6,424,040 to Nag, *et al.* ("Nag"). Independent Claim 25 currently includes the element that a second dielectric layer is located directly on a resistive layer and directly on a top surface of the first and second contact pads. As previously established, Bailey fails to teach or suggest this element. Nag also fails to teach or suggest this element.

Nag is being offered for the sole proposition that interconnects may comprise a Ti/TiN/Al/TiN stack. Notwithstanding the accuracy of the Examiner's proposition, a teaching that interconnects may comprise a Ti/TiN/Al/TiN stack is very different from a teaching or suggestion that a second dielectric layer is located directly on a resistive layer and directly on a top surface of the first and second contact pads, as is presently claimed. Accordingly, Nag also fails to teach or suggest the element that a second dielectric layer is located directly on a resistive layer and directly on a top surface of the first and second contact pads.

Thus, Bailey and Nag, either alone or in combination, fail to teach or suggest the invention recited in independent Claim 25 and its dependent claims, when considered as a whole.

Accordingly, the combination fails to establish a *prima facie* case of obviousness with respect to those claims. Claim 31 is therefore not obvious in view of the combination.

In view of the foregoing remarks, the cited references do not support the Examiner's rejection of Claim 31 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner withdraw the rejection.

#### **IV. Rejection of Claim 33 under 35 U.S.C. §103**

The Examiner has rejected Claim 33 under 35 U.S.C. §103(a) as being unpatentable over Bailey in view of U.S. Patent No. 4,161,431 to Matsunaga, *et al.* ("Mat"). Independent Claim 25 currently includes the element that a second dielectric layer is located directly on a resistive layer and directly on a top surface of the first and second contact pads. As previously established, Bailey fails to teach or suggest this element. Mat also fails to teach or suggest this element.

Mat is being offered for the sole proposition that the resistive layer comprises tantalum nitride and tantalum pentoxide. Notwithstanding the accuracy of the Examiner's proposition, a teaching that the resistive layer comprises tantalum nitride and tantalum pentoxide is very different from a teaching or suggestion that a second dielectric layer is located directly on a resistive layer and directly on a top surface of the first and second contact pads, as is presently claimed. Accordingly, Mat also fails to teach or suggest the element that a second dielectric layer is located directly on a resistive layer and first and second contact pads.

Thus, Bailey and Mat, either alone or in combination, fail to teach or suggest the invention recited in independent Claim 25 and its dependent claims, when considered as a whole.

Accordingly, the combination fails to establish a prima facie case of obviousness with respect to those claims. Claim 33 is therefore not obvious in view of the combination.

In view of the foregoing remarks, the cited references do not support the Examiner's rejection of Claim 33 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner withdraw the rejection.

**V. Allowable Subject Matter**

The Examiner has indicated that Claims 29, 34 and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. While the Applicants at this time believe that independent Claim 25 contains allowable subject matter without the inclusion of the elements of Claims 29, 34 and 35, the Applicants retain the right to roll the elements of Claims 29, 34 or 35 into independent Claims 25 at a later time, if needed.


**VI. Conclusion**

In view of the foregoing amendment and remarks, the Applicants now see all of the Claims currently pending in this application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 25-37.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present application. The Commissioner is hereby authorized to charge any fees, credits or overpayments to Deposit Account 08-2395.

Respectfully submitted,

HITT GAINES, PC



Greg H. Parker  
Registration No. 44,995

Dated: December 6, 2006

P.O. Box 832570  
Richardson, Texas 75083  
(972) 480-8800